

A NEW SPECIES OF MOTH UNDER GENUS *LEMYRA*
(ARCTIINAE: ARCTIIDAE : LEPIDOPTERA)¹

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(With eight text-figures)

Key words: *Lemyra*, *L. stigmata*, *L. wernerthomasi*, *L. walkeri* sp. nov.

A new species *walkeri* of genus *Lemyra* Walker (Family Arctiidae, Lepidoptera) has been described and illustrated. It is closely allied to *Lemyra stigmata* Moore.

INTRODUCTION

The genus *Lemyra* Walker was proposed as a monotypic genus by Walker in 1856 with the type species *extensa* from Sulawesi (Celebes). Hampson (1894, 1901) has not included this genus in his publications. The type species of the genus has been studied in detail by Holloway (1988). Werner Thomas (1990) listed three Indian species i.e. *nigrifrons* Walker, *stigmata* Moore and *khasiana* Thomas under this genus. Werner Thomas (*pers. comm.*) indicated that *Lemyra* Walker would be revised to include a number of species, currently placed under *Spilosoma* Steph. He was revising this group when he died on February 28, 1991. However, Kishida *et al.* (1992) listed these species under genus *Lemyra* in their publication *MOTHS OF NEPAL*. In the present work, two Indian species, namely *stigmata* Moore and *walkeri* sp. nov. have been studied.

The validity of the new species has been confirmed by comparing it with an allied species of genus *Lemyra*, and those of *Spilosoma*. The species *stigmata* was studied by Inoue (1993), while comparing it with a new species *wernerthomasi* from Taiwan. Thus, only *walkeri* is described and illustrated here in detail.

***Lemyra walkeri* sp. nov.**
(Figs 1- 8)

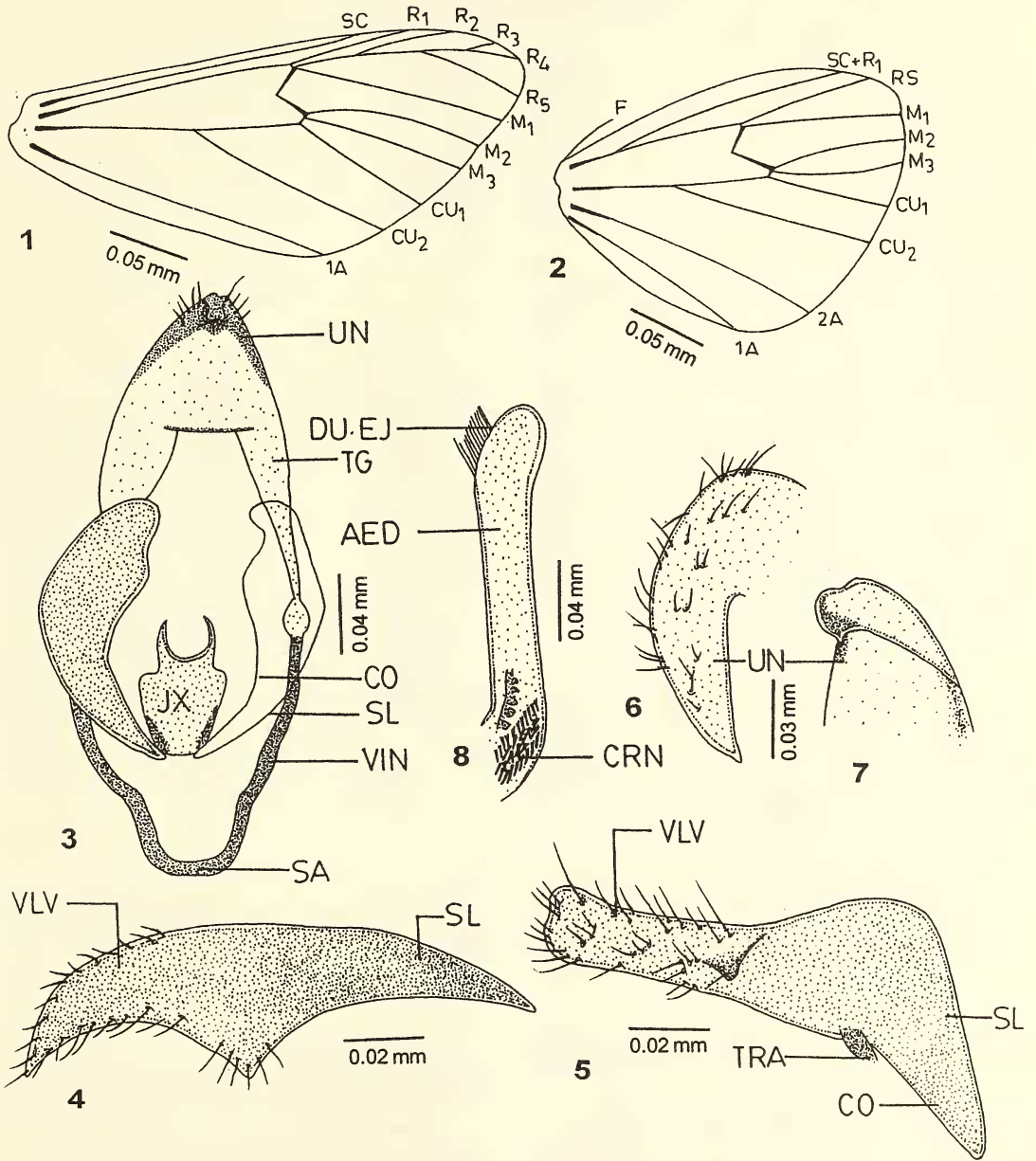
Head with vertex and frons furnished with

pale buff scales, lower half of frons clothed with black scales. Antenna with scape having pale buff scales, flagellum black. Eyes golden-brown, bearing black spots. Labial palpus porrect, reaching lower level of frons and clothed with black scales.

Thorax, collar and tegula covered with pale buff scales; vertex of thorax with dorsal median black streak; pectus black in front. Forewing with ground colour pale buff, with a black, short streak in cell and points on costa and cell, spots below cell and on vein 1A; a medial series of spots angled on medial nervure, then strongly incurved with short streak on inner margin; a postmedial series of short oblique streaks on either side of veins from apex, excurved below median nervure; submarginal spots on either side of veins M₂, M₃ and Cu₁; maculation much stronger on underside; vein M₂ arising from just above lower angle of cell; Cu₁ from before lower angle; Cu₂ from well beyond middle of cell. Hindwing with ground colour whitish buff, a discoidal spot; submarginal spots on Rs and each side of M₂, Cu₂ and 1A; underside discoidal spot not visible, submarginal series prominent; vein Sc + R₁ originating from well beyond middle of cell; Rs from just before upper angle of cell; M₁ from upper angle; M₂ and M₃ from lower angle of cell; Cu₁ from before lower angle of cell. Legs with forecoxae dressed with black scales on underside; femora crimson dorsally, fore femur black ventrally, whereas mid and hind femora fringed with pale yellow scales on underside; fore and midtibia and tarsi yellow; hind tarsi fuscous, with rows of tarsal spines on inner side; outer tibial spurs more than half length of inner ones.

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Figs 1-8: *Lemyra walkeri* n. sp., 1. Forewing, 2. Hindwing, 3-8. Male genitalia

Abdomen covered with crimson scales and long, whitish hairs; ventral side bearing pale yellow scales, dorsal, lateral and sublateral series of black spots. Male genitalia with uncus of moderate length, broad at base, curved, tapering towards distal end, tip blunt, visible as pointed in lateral view, dorsally setosed; a slightly developed acrotergite; tegumen well developed, inverted V-shaped, slightly longer than vinculum; vinculum broad, U-shaped; saccus small. Valva simple, basal half broad; sacculus and costa slightly marked; a medial triangular setose projection on costal side; upper half narrow, cylindrical; valvula and cucullus fused into a nearly straight tip; juxta large, distinctly visible into two parts, basal broad and distal bifurcated U-shaped structure, transtilla small, broad at base. Aedeagus long and slender; tip rounded, slightly curved at distal end, both of its walls equally sclerotized; vesica armed with a patch of cornuti arranged in a typical manner, a sclerotized patch above these, with triangular sharply pointed spines. Female genitalia not examined.

Wing Expanse (Half): Male, 22 mm.

Material Examined: Holotype: Male, Arunachal Pradesh, West Kameng district, Bomdila, 2,600 m, 10.ix.1994, Coll. A.P. Singh. Paratype: 2 Male, Arunachal Pradesh: West Kameng district, Bomdila, 2,600 m, 11.ix.1994, Coll. A.P. Singh.

Distribution: India: Arunachal Pradesh.

Remarks: The new species *walkeri* is closely related to *Lemyra stigmata* Moore,

however, it differs from *stigmata* in having heavier maculation and wing venation as vein M_2 originates from just above lower angle and Cu_1 from before lower angle of cell in forewing; hindwing with vein Rs arising from just before upper angle of cell and Cu_1 from before lower angle; male genitalia with valva having triangular medial projection; aedeagus short, without any sclerotized projection at distal end; juxta also differs in shape. The species under reference is also clearly distinct from *wernerthomasi* in wing maculation, shape of valva and aedeagus.

Etymology: The name pertains to the eminent lepidopterist, F. Walker.

Abbreviations used: 1A = First anal vein, 2A = Second anal vein, AED = Aedeagus, CO = Costa, CRN = Cornuti, Cu_1 = First cubital vein, Cu_2 = Second cubital vein, DU.EJ = Ductus ejaculatorius, F = Frenulum, JX = Juxta, M_1 = First median vein, M_2 = Second median vein, M_3 = Third median vein, R_1 = First radial vein, R_2 = Second radial vein, R_3 = Third radial vein, R_4 = Fourth radial vein, R_5 = Fifth radial vein, Rs = Radial Sector, SA = Saccus, Sc = Subcosta, Sc + R_1 = Stalk of Sc + R_1 , SL = Sacculus, TG = Tegumen, TRA = Transtilla, UN = Uncus, VIN = Vinculum, VLV = Valva.

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